

# A Study On Motor Ride Sharing Service In Dhaka City, Present And Future Challenges

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**Abstract:** Ridesharing in Bangladesh began on May 7, 2016, with the launch of an app called "Share A Motorcycle," or SAM. The current and future issues of Dhaka City's motor ride-sharing services are examined in this paper. With a sample of 570 or more consumers or users, the present state and potential are examined. A total of 570 people have responded to the survey. Because of its specific advantages, because of its real-time catalyst, more convenient, on-demand position, and consumer, it has garnered widespread favor among the younger generations and enterprises. Concerns about funding, a lack of logistical support, a lack of understanding, bad government regulations, fierce rivalry, and other problems have all been highlighted as major roadblocks.

**Keywords:** Questioner Survey, Ridesharing Services, Vehicles, Passengers, Dhaka City.

## INTRODUCTION:

The expansion of transportation and conveyance networks, including ride-sharing, is one of the major strategies for economic growth in developing countries like Bangladesh. As a result, web-based service firms such as app-based ride-sharing, travel tickets, online purchase, and others are thriving, decreasing the amount of effort, time, and money associated with traveling from one area to another. Ride-sharing services play an essential role in social, economic, ecological, and environmental concerns by reducing traffic bottlenecks and reducing the number of vehicles on the road. Because it is useful to locate the adjacent vehicles in the smallest amount of time, several app-based businesses have exploded as a result of the broad availability of smartphones and ubiquitous internet access[1][2].

## LITERATURE REVIEW AND BACKGROUND:

Despite being one of the most congested cities in South Asia, ride-sharing is a growing popularity in Dhaka, Bangladesh's capital. In Dhaka, ride-sharing apps such as Uber, Pathao, and others are transforming the transportation business. Ride-sharing services are mostly available in Bangladesh's capital, although they are increasingly spreading around the country. Dhaka has a large customer base, is getting more wealthy, and has a growing internet connection rate. As a result, it's an excellent location for sharing-economy businesses to grow. Ride-share systems have grown in popularity in the sharing economy during the previous two years. In the Uber business, multinational firms do not invest in physical infrastructure (such as industries or service outlets) or typical funds, Pathao, or other ride-sharing firm models (such as cars or garages). They do not hire people, unlike traditional businesses. The drivers are essentially participants on a platform that generates income. The capacity of ride-share systems to adapt to local customer requirements while accounting for economic realities will determine their fate. When traveling internationally, a private automobile is only utilized 4% of the time, with an average of 50-60 trips each month. The automobile is parked for the rest of the period. By boosting the use of autos, ride-sharing reverses this trend. In Dhaka, consumer dissatisfaction with CNG auto-rickshaws is well-known. For many clients, the fact that ride-share delivers a pretty smooth door-to-door service is a plus [5]. There's no denying that Uber and Pathao are "middle-class urban responses," but they haven't yet touched the masses. Similarly, ride-sharing schemes in Dhaka's transportation industry aren't a "magic bullet" for reducing traffic congestion [6]. In recent years, transportation and communication infrastructures all around the world have undergone substantial changes. The notion of the global community is being introduced and used to change the globe into a place where individuals from all over the universe may virtually converse with one another in the minimum time. In developing countries like Bangladesh, the ever-growing tsunami of global communication networks and technology has begun to flow freely. The optimum use of smart technology and the internet are intrinsically tied.

The transportation and communication systems have experienced drastic effects as a result of increasing industrialisation and infrastructural expansion. The allocative efficiency in mobile communications, business, and transportation overpower any other sector's developments due to the use of modern technology such as advanced vehicles, mobile communication networks, authentic comments, standard bandwidth of the internet, interactive web technology and provider, and so on. The number of internet users has tripled in the last five years. In 2013, only 6.5% of Bangladeshis used the internet. By 2017, however, this figure had climbed to 18.7% of the total population. In 2017, the e-commerce industry was expected to generate \$110-115 million (about 900 crores) in revenue (Bangladesh Association of Software and Information Services, 2018). The entire country, as well as the entire world, has become an online marketplace where purchasers may find the products and services they desire with only a few mouse clicks. From the perspective of Bangladesh, this is becoming increasingly popular among all types of service industry workers. Currently, Ride-sharing, which is both fluid and available on the internet, has invited service clients to the table and providers together on short notice, which has a variety of benefits, including reducing the stress of driving excessively personal autos, maintenance, congestion, and expense. Furthermore, this is advantageous in terms of producing new jobs for students and college students, particularly on a part-time basis[3].

**Objective of This Study:**

- \*To assess the present ride-sharing service in the Dhaka Metro.
- \*To assess the viability of a ride-sharing firm.
- \*To research the challenges of ride-sharing.
- \*To develop ride-sharing suggestions that are acceptable to both users and suppliers.

**Details of Study Area:**

The following report will focus on Dhaka City. The city has a total area of 306 km<sup>2</sup> (118 sq mi) and a population of 21,741,090 people. Dhaka is one of the world's fastest developing megacities, yet its citizens face a critical dearth of transportation options. Dhaka's transportation system is mostly dependent on roads. Dhaka's traffic system is characterized as a heterogeneous traffic system because of the significant differences in the operation and performance characteristics of motorized, non-motorized, slow-moving, and fast-moving vehicles using the same road space (Karim, et al 1998). Dhaka's average driving speed has reduced from 21 km/h to 7 km/h in the last 10 years, according to a recent World Bank study (2017), which is slightly quicker than the average walking speed. 3.2 million work hours are wasted every day due to traffic congestion. According to a study conducted by the Copenhagen Consensus Centre (2017), Dhaka's average speed is currently 6.4 km/h, and if current automobile development rates continue, the average speed might drop to 4.7 km/h by 2035 without considerable public transit. The government has already altered the Strategic Transport Plan (STP) for the next 20 years in order to increase traffic speed (2015-2035)[4].

**METHODS OF RESEARCH****Direct Observation:**

Data is obtained using an observational manner in this process. The analyst does not meddle with the situation's behaviour or result with this technique. The advantage of direct observation is that it offers context information about people, circumstances, interactions, and the environment. This field research approach is commonly employed in a public setting or environment, so it is not used in a private setting since it is immoral.

**Participant Observation:**

With this strategy, the researcher is fully involved in the study process, not just as an observer but also as a participant. This procedure is also carried out in a natural setting, but the main difference is that the researcher participates in the talks and may steer them in the right direction. In this strategy, researchers live with study participants in a pleasant atmosphere in order to make them feel at ease and open up to the in-depth talks.

**Qualitative Interviews:**

In qualitative interviews, closed-ended questions are asked directly to research participants. Open-ended, semi-structured, standardized, or casual and conversational qualitative interviews are possible. This supplies the work with a large amount of data to go through. This also aids in the collection of relational data. One-on-one conversations, group discussions, and text analysis can all be used in this type of field work.

**STEPS OF RESEARCH:**

1. **Assemble the Correct Team:** Having the right team to perform field research is critical. The researcher and any auxiliary team members' roles are critical, and specifying the tasks they must do with stated relevant milestones is crucial. For the field study to be successful, senior management must be invested as well.
2. **Recruiting Study Participants:** The success of every research endeavor is determined of the people who take part in it. It is critical to determine who will be a part of the study using sampling procedures.

3. **Data Gathering Methodology:** As previously mentioned, there are a variety of data collection methods for study. Surveys, interviews, case studies, and observation might all be used. All of these approaches must be defined, as well as the milestones for each of them, from the beginning. In the case of a survey, for example, the survey design must be devised and evaluated even before the study begins.

4. **Data Analysis:** Analyzing the data obtained is critical for validating the study hypothesis and determining the field research's conclusion.

5. **Results:** Once the data has been examined, it is critical to communicate the findings to the research's stakeholders so that they may be implemented.

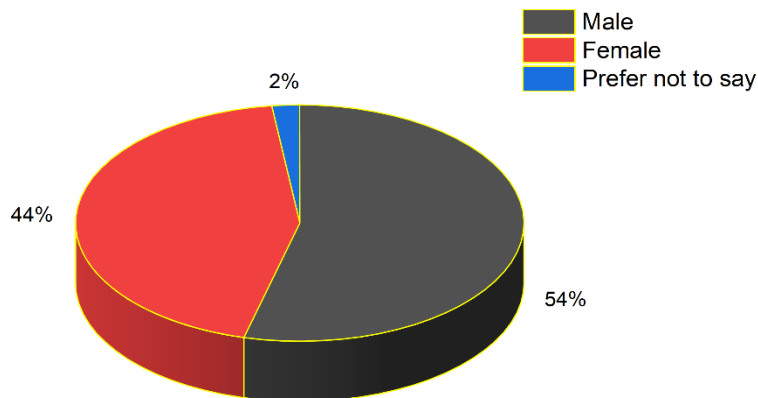
#### **Adopted Methodology:**

A systematic approach is referred to as study methodology. It is a systematic process of performing the study. For proper analysis of study, Systematic procedure of performing the study place and extremely important rule. A proper methodology is selected to make this online survey. The following is the procedure for doing the study:

1. The first stage is to determine the objectives and study area.
2. It is decided to conduct a questionnaire survey.
3. The necessary information is gathered from reliable sources.
4. Data is collected using an online survey approach that involves direct observation, participant observation, and qualitative interviews.

#### **Gender:**

From 570 respondents, about 54% were male and 44% were female. Females outnumber males when it comes to going outside their homes across Bangladesh. However, within Dhaka, the following figures show that almost equally male and female people go outside every day. Here some people didn't mention their gender but still joined the survey with other questions.



**Figure 1:**The percentage of user gender.

#### **Ages:**

From a total of 570 responses, 38.1% of users' age is 24-36 years old, 28.1% are 18-24 years old, 22.3% are 36-60 years old, 7.2% are 12-18 years old, and the rest of all are more than 60 years old. All the data denotes that office going or working people are using ride sharing services mostly.

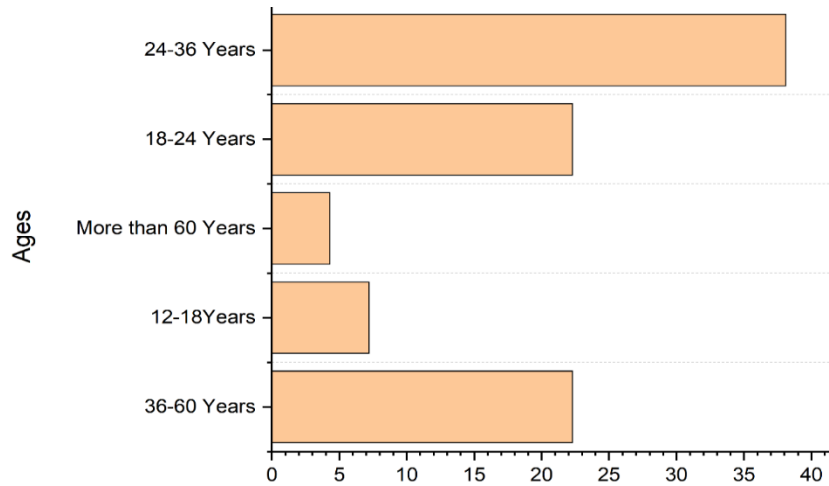


Figure 2: The percentage of user from an age range.

**Occupation:**

Among all the responses, around 32.5% are private job holders, 31.1% are students, 22.5% are doing business, and 13.9% are working for the government. We couldn't find any self-employed individual workers here. Private job holders are the top users of ride sharing in Dhaka. Surprisingly, students (most of them from universities) are also using ride sharing as their mode of transportation.

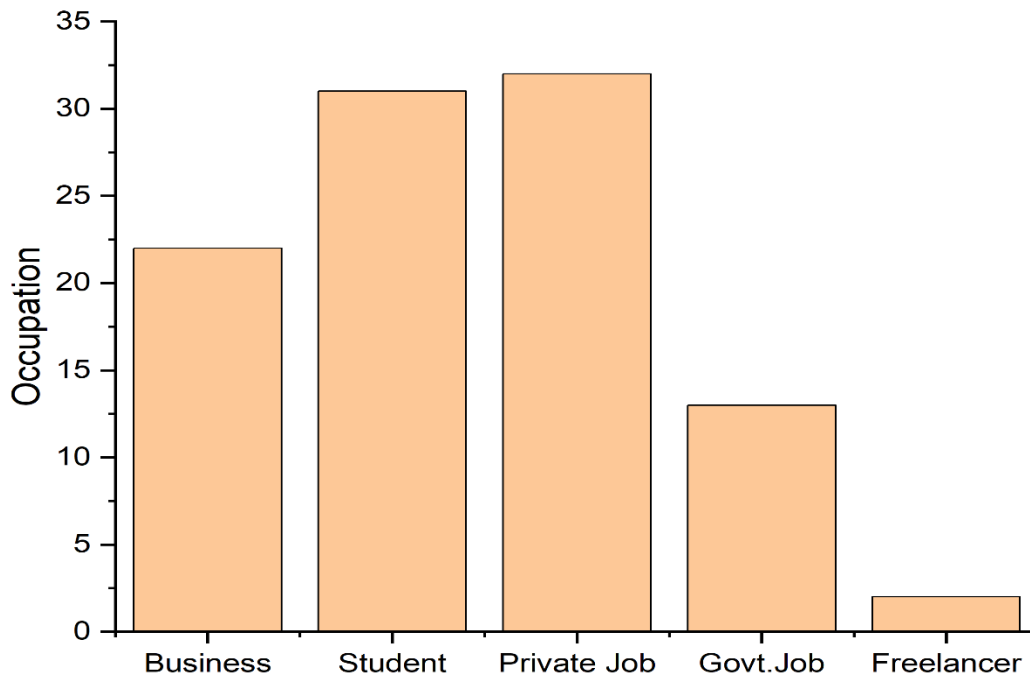


Figure 3: The percentage of the user from Occupation's.

**Purpose of Daily Traveling:**

This pie chart indicates user daily purposes for traveling. Most of the users using ride sharing for office, work and secondly for education. The Public transportation system of Dhaka waste too much time. That's why ride sharing is getting more popularity.

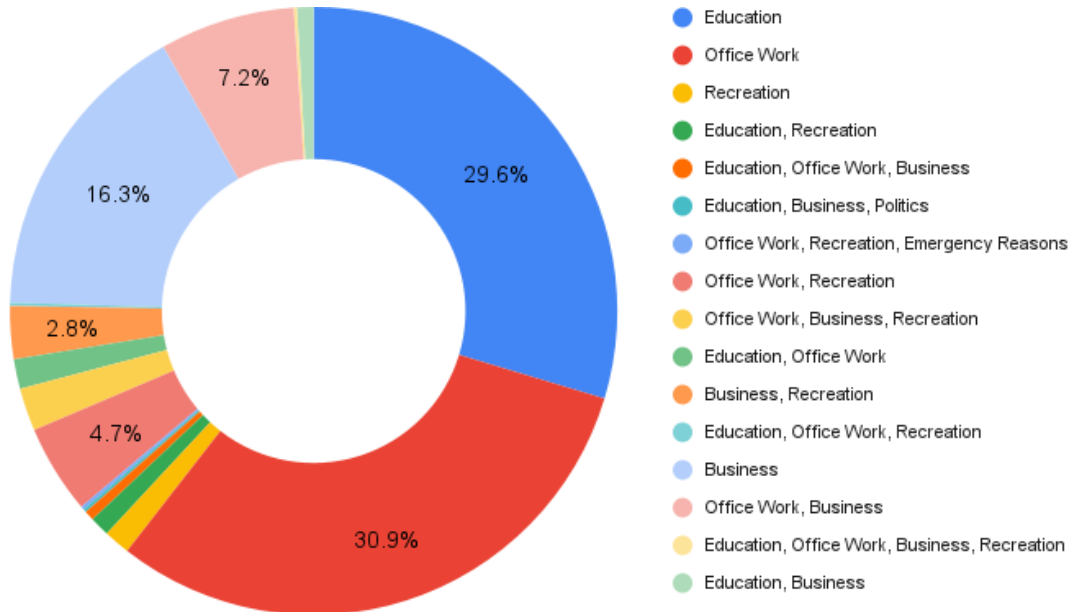


Figure 4: The percentage of traveling purposes.

**Regular Mode of Traveling:**

Bangladesh has a multimodal transportation system. To move around the city, rickshaws, auto-rickshaws (also known as CNGs), normal taxicabs, basic bikes, air-conditioned buses, and trains are employed. When using a mode of transportation that does not issue passenger tickets, such as auto-rickshaws, the fare is usually negotiated between the passenger and the driver before the journey begins.

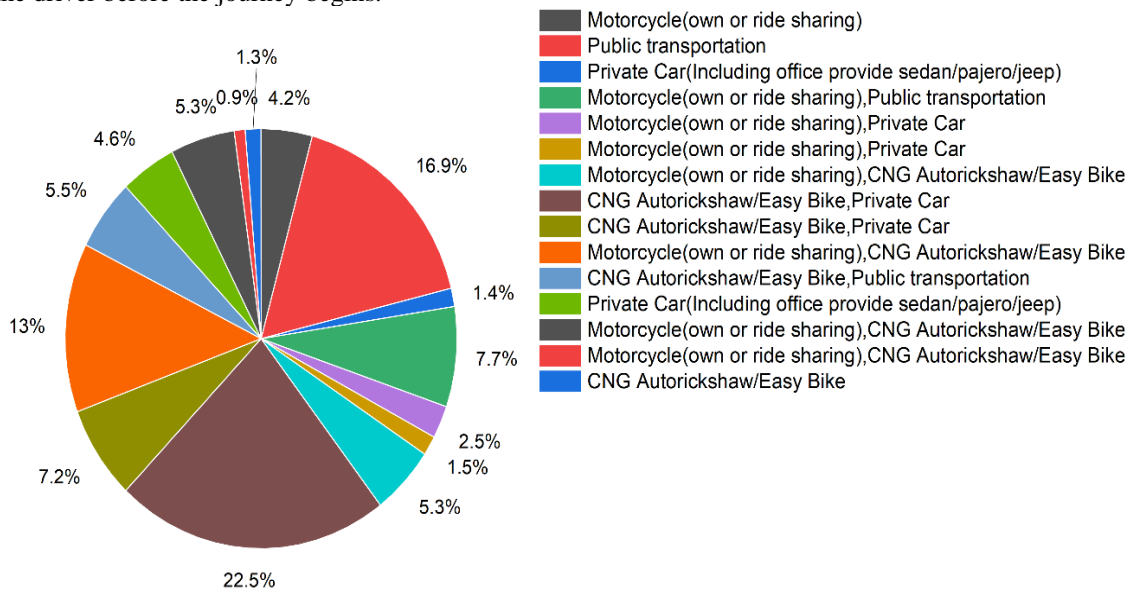


Figure 5: Mode of regular traveling.

**Users of Ride-sharing:**

A total of 570 people were polled, and 77% said they use ridesharing services at least twice a month. The remaining 11%, on the other hand, have never used a ride-sharing service. Only 11% of individuals utilize ride-sharing on a regular basis. In Dhaka, a large number of individuals use ride-sharing services.

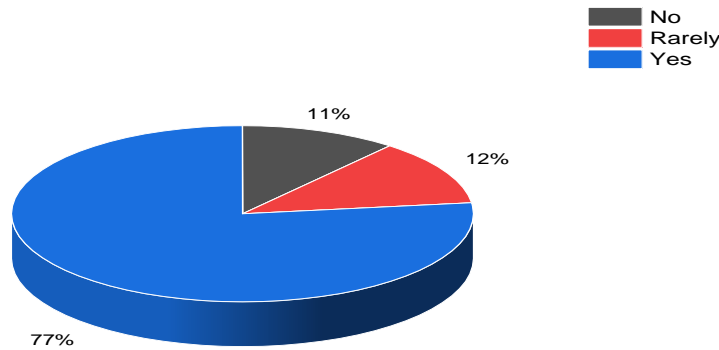


Figure 6: Users of Ride-sharing

**Factors affecting to use Ride-sharing:**

In Bangladesh, the concept of demand-responsive transportation (DRT) services, often known as ride-sharing services, is relatively new. Traditional on-demand transportation services, such as automobile or truck rental, were always accessible in a variety of formats. Uber, Pathao, Shohoz Rides, Obhai, and Pick Me are among the local and international ride-hailing firms that operate in Dhaka. According to media sources, the ride-sharing market is valued roughly Tk 2,200 corer, or about 23% of the country's transportation sector. Many overseas investors were drawn to the DRT services business because of the present market size and the possibility for additional expansion. It is extremely popular among the younger generation because to its time-saving, handy, and on-demand nature, which is absolutely lacking in traditional transportation. Since one must wait for their chosen destination at a bus stop, rail station, or port, ride-sharing frequently picks up from the customer's door. In the meanwhile, user-friendliness, real-time reaction, and minimal maintenance burden all urge users to utilize it quickly in a modest way.

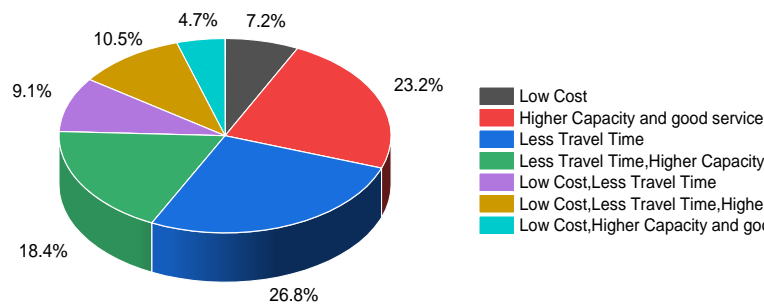


Figure 7: Factors affecting to use Ride-sharing

**Future Challenges:**

- Badly needed government support.
- Increasing smartphone users and teach them about this technology then customer use too is ride sharing App.
- Rent must be kept within limits So that the customer is interested for ride sharing.
- The proper training needed to ride sharing a company's employee.
- Creating a loan system for ride sharing company for development their business.
- Needed good investor for ride sharing, business development.
- Needed high quality expert for ride sharing software development.
- Needed good management system for ride sharing business.

**Result and Conclusion:**

This industry is showing signs of expansion. The technological revolution has enabled this, and the number of users is quickly increasing. The study is based on real users' responses to a few key questions, so everyone who is directly or indirectly involved in it may profit. Commuters have chosen ride-sharing services because they are convenient, time-

saving, and cost-effective. People may escape the wild rushes at bus terminals or enticing auto rickshaw or rickshaw drivers by using ride sharing. For many people, ridesharing is also a source of income. In the previous several years, at least 12 firms offering ride-sharing services have joined the market. Over 70,000 individuals, including bikers and pillion riders, are expected to be using the services. Experts in the transportation industry, urban planners, and road safety advocates, on the other hand, are concerned that the growing number of motorbikes would wreak havoc on the streets and exacerbate traffic congestion. Every year, the number of motorbikes registered in Dhaka grows. After ride-sharing services were implemented, the number increased dramatically in the previous year and a half. According to data from the Bangladesh Road Transport Authority (BRTA), the number of registered motorbikes in the capital has doubled in the previous eight years. There are some recommendations for comfort and reliability based on a study of ride sharing commuters in the Dhaka city, which was obtained using an open-ended question in a semi structured questionnaire. Ride-sharing app pick-up times vary, and call cancellations caused by incorrect GPS have a significant influence on dependability. Furthermore, owing to a lack of training, unprofessional drivers are unable to browse apps, reducing response. Commuters frequently advise enhancing tangibility in terms of physical condition, eyeglasses, and helmets, and abrupt engine breakdowns. These issues must be addressed right now. We couldn't come up with a plan to solve the triangle dilemma that Bangladesh's ride-sharing platforms are experiencing. The BRTA and ride-hailing companies should outline their visions. In Bangladesh, ride-sharing is a relatively new concept, but it is swiftly gaining popularity. In our research, we observed that the majority of customers viewed ride-sharing programs favourably. Women, in particular, believe the service is safer than alternative modes of transportation. Harassment of women on public transportation is a typical occurrence in Bangladesh (Especially in Dhaka). Women are increasingly interested in using ride-sharing applications due to the convenience and security they provide. It has the potential to boost the economy while also alleviating Dhaka's traffic congestion. Ride-sharing businesses are attempting to prioritize customer service in order to benefit both drivers and passengers. Factors including efficiency, safety, and dependability impact customers' decisions and perceptions of economic cooperation. Despite the fact that many respondents believe ride-sharing is not a cost-effective service.

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